## RFI-2011C554 Questions and Responses

1. Please clarify the deliverable(s) for the short-term effort – hardware, drawings, tech/status reports, etc.

Short-term deliverables will include a final report stating the design concepts, modeling results (if any), and breadboard demonstration results using GFE seed laser.

2. What are the acceptance criteria for the breadboards?

The breadboard performance metrics will be compared with the short-term requirements listed in Table 1 of the synopsis. Success criteria for the breadboard will be that all parameters meet or exceed the requirements listed under the short-term breadboard goals in Table 1 of the synopsis.

3. Is the summer of 2012 the "on doc" delivery date for the breadboard?

The delivery date of the breadboard demonstration will be 12 months from the start date of the contract if the Government decided to go to procurement.

4. What are the requirements for the Engineering Test Unit?

The requirements of the Engineering Test Unit (ETU) are the similar to those listed under the "Long-Term Goals" column of Table 1.

5. What performance and reliability tests will be performed?

The breadboard will be tested to verify performance with those listed under the "Breadboard Demo" column of Table 1. The ETU performance will be tested to verify the performance with those listed under the "Long Term Goals" column. The ETU will also be used for long duration testing to verify the laser design for reliability. The government reserves the rights to contract a team of independent reviewers to access the risks and reliability of the vendor's proposed spaceborne design.

6. When will NASA decide to release an RFP?

Unknown at this time.

7. With regard to the Beam Quality (BQ) parameter, if up to 8 individual beams are being used does the BQ of <1.4 Diffraction Limited (DL) apply to each individual beam?

Yes, each individual beams must meet the beam quality requirement. All the beams must overlap in the far field.

8. Does the number of lasers (up to 8 individual lasers) apply on a per wavelength basis (ie, 8 lasers per wavelength at 1572 and 1529 nm)?

Yes, this applies to both 1572 and 1529 nm bands.